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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,244	10/12/2000	Shing Mark Lin	ADAPP169	1180

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EXAMINER
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TRUONG, LECHI

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/687,244

Applicant(s)

LIN ET AL.

Examiner

LeChi Truong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-2, 4-20 are presented for the examination. Claim 3 is cancelled.
2. The cross reference related to the application cited in the specification must be updated (i.e. update the relevant status, with PTO serial numbers or patent numbers where appropriated, on page 1 of the application filed on 10/12/2002).

#### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-2, 4-6 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.
4. Claim 1 is directed to method steps, which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, defining, enabling, receiving, altering, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process (see MPEP 21061). Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change "method" to "computer implemented method" in the preamble to overcome the outstanding 35 U.S.C. 101 rejections).

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5. Claims 7-20 are non-statutory because it is not tangibly embodied in a manner so as to be executable as the only hardware is in an intended use statement.
6. Claim 7 is rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter as not being tangible because A profile data structure claims do not require use of hardware computer to perform, and would not result in a practical application producing a useful, concrete, an tangible result to form the basis of statutory subject matter under 35 USC 101.
7. Claims 16 defines "System" in the preamble and the body of the claim recites " an operating dependent code", " an operating independent code". An operating dependent code and an operating independent code appear to be software modules, which are not tangible. Therefore, claim 16 is non-statutory because it recites a system claim that comprises non-tangible embodiments.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarty et al (US. Patent 5,954,796) in view Mohammed (US. 6,418,555 B2).

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9. As to claim 1, McCarty teaches the invention substantially as claimed including: a data structure (an FC-specific LOG Function information structure 530, col 8, ln 27-67), a Fibre Channel attribute value (port\_name 535C, its unique Node\_Name 535 B, Decice\_Function 535 D, Device\_type 535 E, col 8, ln 27-67), a Fiber channel controller (col 1, ln 30-35), a functionality of a Fibre channel Controller (the LOG Function, col 8, ln 27-67), user modification of the Fibre Channel attribute value (a configuration change in the FC environment 220 and it would make any necessary changes in the FC information structure 530, col 9, ln 1-15), a modification request( link element 525 comprise a BUS\_TARGET\_LUN nexus , col 8, ln 40-67/ the SCSI command protocol include a LUN, col 3, ln 15-37), modification ( the mapping between the link element 525 and the FC information structure 530, col 8, ln 40-67), a code segment/ an Operating System Module(OMS), the OMS ( the higher level OS-compatible interface standard, col 8, ln 40-67, ln 1-5/the OS environment, col 4, ln7-20/col 8, ln 27-67), the OSM being providing the modification request ( these link elements will presented to the upper level software structures that are present in the OS environment for proper commands , col 10, ln 1-5), operation of the Fiber channel( the mapping, col 8, ln 27-67), altering the functionality of the Fibre Channel(FC-specific information structures associated with unique OS-compatible link elements are suitably updated, col 9, ln 1-44).

10. McCarty does not explicit teach the term “alter the attribute of controller without the modification request being translated into Fibre channel commands ”. However, Mohammed teaches alter the attribute of controller without the modification request being translated into Fibre channel commands (processing with upgrade process, the detection module 154 next retrieves the command line, which may be stored in the command entry of the operating system

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registry 166 that is used to invoke the upgrade module 156, col 5, ln 17-20/ deleting all entries associated with the software components that are to be upgraded, col 6, ln 54-60).

11. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of McCarty and Mohammed because Mohammed's alter the attribute of controller without the modification request being translated into Fibre channel commands would improve the efficiency of McCarty's system by allowing the software components such as device drivers are automatically upgraded when a system migrates from one operating system to another.

12. **As to claim 2**, McCarty teaches the modification request (the upper – level commands, col 8, ln 60-67).

13. Claims **4-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarty et al (US. Patent 5,954,796) in view Mohammed (US. 6,418,555 B2), as applied to claim 1 above, and further in view of APA (Admitted Prior Art).

14. **As to claim 4**, McCarthy and Mohammed do not teach a Fibre Channel Hardware Interface Module. However, APA teaches a Fibre Channel Hardware Interface Module (CHIM 106, page 5, ln 10-21).

15. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of McCarty and APA because APA's "Fibre Channel controller" would improve the efficiency of McCarty and Mohammed's systems by checking the presence of adapter hardware, initialize the adapter, and access connected devices.

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16. As to **claim 5**, APA teaches the modification request is received by the FCHIM (the OSM 104 translates the command into an operating system independent CIM, col 4, ln 18-21/the CHIM 106 ... receives CHIM commands and translates the CHIM commands into commands for the SCSI controller, page 5, ln 8-18).

17. As to **claim 6**, McCarthy teaches the function of the Channel controller (FC-specific information structures associated with unique OS-compatible link elements are suitably updated, col 9, ln 1-44/ col 8, ln 28-67), the Fibre Channel attribute value (port\_name 535C, its unique Node\_Name 535 B, Decice\_Function 535 D, Device\_type 535 E, col 8, ln 27-67)

18. As to **claim 7**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, McCathy teaches the Fibre Channel attribute values (port\_name 535C, its unique Node\_Name 535 B, Decice\_Function 535 D, Device\_type 535 E, col 8, ln 27-67/ col 7, ln 45-67), a data type value (0\_0\_0/ 0\_1\_0, col 9, ln 45-67), an operating system depend code module (the higher level OS-compatible interface standard, col 8, ln 40-67, ln 1-5/ the OS environment, col 4, ln 7-20/col 8, ln 27-67) and APA teaches the operating system as the operating system independent (CHIM 106, page 5, ln 1-18).

19. As to **claim 8**, McCarthy teaches the operating system dependent code module (the higher-level OS-compatible interface standard, col 8, ln 40-67, ln 1-5/ the OS environment (col 4, ln 7-20/col 8, ln 27-67 ).

20. As to **claim 9**, McCarthy teaches the OSM is further capable of providing operating system independent commands (these link elements will be presented to be the upper level software structures that are present in the OS environment for the proper commands, col 10, ln 1-5).

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21. **As to claim 10**, APA teaches CHIM 106 (page 5, ln 1-18).
22. **As to claims 11, 12**, they are apparatus claims of claims 5, 6; therefore, they are rejection for the same reasons as claims 5 and 6.
23. **As to claim 13**, McCarthy teaches a Fibre Channel maximum port value (port name, col 7, ln 45-67/ col 8, ln 40-67).
24. **As to claim 14**, McCarthy teaches a Fibre Channel Logical Unit Number (LUN) (a BUS\_TARGET\_LUN, col 9, ln 45-67).
25. **As to claim 15**, McCarthy teaches a Fibre Channel Arbitrated Loop value (an Arbitrated Loop Physical Address, col 7, ln 45-67).
26. **As to claim 16**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In addition, McCarthy teaches a profile data structure (an FC-specific LOG Function information structure 530, col 8, ln 27-67), a Fibre Channel attribute value (port\_name 535C, its unique Node\_Name 535 B, Device\_Function 535 D, Device\_type 535 E, col 8, ln 27-67), an operating system depend code module (the higher level OS-compatible interface standard, col 8, ln 40-67, ln 1-5/ the OS environment, col 4, ln 7-20/ col 8, ln 27-67), altering the functionality of the Fibre Channel (FC-specific information structures associated with unique OS-compatible link elements are suitably updated, col 9, ln 1-44) and APA teaches an operating system independence code (CHIM 106, page 5, ln 1-18), the OSM 104 makes a series of calls to the MHIM 106 (page 5, ln 1-8) that allow the CHIM 106 communicate with the Fibre channel.

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27. As to claim 17, APA teaches the OSM being capable of receiving operations system specific commands (the OSM 104 receives the operating system specific device access command, page 4, ln 17-21).

28. As to claim 18, APA teaches the OSM is further capable of providing operation system independent commands (the OSM 104 translates the command into an operating system independent, page 4, ln 17-27).

29. As to claims 19, 20, they are apparatus claims of claims 10, 11; therefore, they are rejected for the same reasons as claims 10, 11 above.


30.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100